

L3 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2008:739313 CAPLUS
 DN 149:91973
 TI Cyclic chemical vapor deposition of metal-silicon containing films
 IN Lei, Xinjian; Thridandam, Hareesh; Xiao, Manchao; Bowen, Heather Regina;
 Gaffney, Thomas Richard
 PA Air Products and Chemicals, Inc., USA
 SO U.S. Pat. Appl. Publ., 5pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20080145535	A1	20080619	US 2007-949868	20071204
	KR 2008055689	A	20080619	KR 2007-129800	20071213
	EP 1939323	A1	20080702	EP 2007-123150	20071213
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS				
	CN 101220465	A	20080716	CN 2007-10300368	20071213
PRAI	US 2006-874653P	P	20061213		
	US 2007-949868	A	20071204		

L3 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2007:621154 CAPLUS
 DN 147:43828
 TI Method of manufacturing semiconductor device having tungsten carbon
 nitride layer
 IN Jeon, Taek-Soo; Cho, Hag-Ju; Lee, Hye-Lan; Shin, Yu-Gyun; Kang, Sang-Bom
 PA Samsung Electronics Co., Ltd., S. Korea
 SO U.S. Pat. Appl. Publ., 19pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070128775	A1	20070607	US 2006-607600	20061201
	KR 666917	B1	20070110	KR 2005-116754	20051202
PRAI	KR 2005-116754	A	20051202		

L3 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2007:546662 CAPLUS
 DN 147:17560
 TI The role of ammonia in atomic layer deposition of tungsten nitride
 AU Mukhopadhyay, Atashi B.; Musgrave, Charles B.
 CS Department of Chemical Engineering, Stanford University, Stanford, CA,
 94305, USA
 SO Applied Physics Letters (2007), 90(17), 173120/1-173120/3
 CODEN: APPLAB; ISSN: 0003-6951
 PB American Institute of Physics
 DT Journal
 LA English
 RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2007:485655 CAPLUS
 DN 146:473503
 TI Film-forming method and film-forming apparatus

IN Yamasaki, Hideaki; Kawano, Yumiko
 PA Tokyo Electron Limited, Japan
 SO PCT Int. Appl., 48pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007049612	A1	20070503	WO 2006-JP321156	20061024
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	JP 2007113103	A	20070510	JP 2005-308817	20051024
	KR 2008023741	A	20080314	KR 2008-701229	20080116
PRAI	JP 2005-308817	A	20051024		
	WO 2006-JP321156	W	20061024		

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2008 ACS ON STN
 AN 2007:405366 CAPLUS
 DN 146:413700
 TI Ti, Ta, Hf, Zr and related metal amidosilanes for ALD/CVD of metal-silicon nitrides, oxides, oxides or oxynitrides
 IN Norman, John Antony Thomas; Lei, Xinjian
 PA Air Products and Chemicals, Inc., USA
 SO Eur. Pat. Appl., 17pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1772460	A1	20070411	EP 2006-255104	20061003
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	US 20070082500	A1	20070412	US 2006-522768	20060918
	CN 1990492	A	20070704	CN 2006-10144437	20060930
	KR 2007038914	A	20070411	KR 2006-97693	20061004
	JP 2007131616	A	20070531	JP 2006-275057	20061006
PRAI	US 2005-724757P	P	20051007		
	US 2006-522768	A	20060918		
OS	MARPAT 146:413700				

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2008 ACS ON STN
 AN 2007:53943 CAPLUS
 DN 146:153750
 TI Method of forming film and apparatus for film formation

IN Nakamura, Kazuhito; Yamasaki, Hideaki; Kawano, Yumiko
 PA Tokyo Electron Limited, Japan
 SO PCT Int. Appl., 44pp.

CODEN: PIXXD2

DT Patent
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007007680	A1	20070118	WO 2006-JP313595	20060707
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	JP 2007039806	A	20070215	JP 2006-185655	20060705
	EP 1918417	A1	20080507	EP 2006-768005	20060707
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	CN 101128620	A	20080220	CN 2006-80006297	20070828
	KR 2007100391	A	20071010	KR 2007-719763	20070829
PRAI	JP 2005-199281	A	20050707		
	JP 2006-185655	A	20060705		
	WO 2006-JP313595	W	20060707		
RE.CNT 5	THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L3 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2008 ACS ON STN

AN 2006:818014 CAPLUS

DN 145:239565

TI Preparation of metal silicon nitride films via cyclic deposition

IN Lei, Xinjian; Thridandam, Hareesh; Cuthill, Kirk Scott; Hochberg, Arthur Kenneth

PA Air Products and Chemicals, Inc., USA

SO Eur. Pat. Appl., 16pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1691400	A1	20060816	EP 2006-2371	20060206
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	US 20060182885	A1	20060817	US 2005-57446	20050214
	TW 265207	B	20061101	TW 2006-95104258	20060208
	KR 2006091240	A	20060818	KR 2006-12812	20060210
	KR 766843	B1	20071017		
	CN 1821440	A	20060823	CN 2006-10008986	20060214
	JP 2006225764	A	20060831	JP 2006-36223	20060214
PRAI	JP 2005-57446	A	20050214		
RE.CNT 7	THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L3 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2004:60731 CAPLUS
 DN 140:120241
 TI Vapor deposition of tungsten nitride
 IN Gordon, Roy G.; Suh, Seigi; Becker, Jill
 PA President and Fellows of Harvard College, USA
 SO PCT Int. Appl., 37 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004007796	A1	20040122	WO 2003-US21281	20030709
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003248850	A1	20040202	AU 2003-248850	20030709
EP 1543177	A1	20050622	EP 2003-764377	20030709
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1675402	A	20050928	CN 2003-819074	20030709
JP 2005533178	T	20051104	JP 2004-521556	20030709
US 20060125099	A1	20060615	US 2005-520456	20051019
PRAI US 2002-395572P	P	20020712		
WO 2003-US21281	W	20030709		

OS MARPAT 140:120241
 RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2003:727571 CAPLUS
 DN 139:356711
 TI Characteristics of tungsten carbide films prepared by plasma-assisted ALD using bis(tert-butylimido)bis(dimethylamido)tungsten
 AU Kim, Do-Heyoung; Kim, Young Jae; Song, Yo Soon; Lee, Byung-Teak; Kim, Jin Hyeok; Suh, Seigi; Gordon, Roy
 CS Faculty of Applied Chemical Engineering and Research Institute for Catalysis, Thin Film Laboratory, Chonnam National University, KwangJu, 500-757, S. Korea
 SO Journal of the Electrochemical Society (2003), 150(10), C740-C744
 CODEN: JESQAN; ISSN: 0013-4651
 PB Electrochemical Society
 DT Journal
 LA English

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2003:473448 CAPLUS
 DN 139:189002
 TI Highly Conformal Thin Films of Tungsten Nitride Prepared by Atomic Layer Deposition from a Novel Precursor

AU Becker, Jill S.; Suh, Seigi; Wang, Shenglong; Gordon, Roy G.
 CS Department of Chemistry and Chemical Biology, Harvard University,
 Cambridge, MA, 02138, USA
 SO Chemistry of Materials (2003), 15(15), 2969-2976
 CODEN: CMATEX; ISSN: 0897-4756
 PB American Chemical Society
 DT Journal
 LA English
 RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2003:267659 CAPLUS
 DN 139:44679
 TI Diffusion barrier properties of tungsten nitride films grown by atomic
 layer deposition from bis(tert-butylimido)bis(dimethylamido)tungsten and
 ammonia
 AU Becker, Jill S.; Gordon, Roy G.
 CS Department of Chemistry and Chemical Biology, Harvard University,
 Cambridge, MA, 02138, USA
 SO Applied Physics Letters (2003), 82(14), 2239-2241
 CODEN: APPLAB; ISSN: 0003-6951
 PB American Institute of Physics
 DT Journal
 LA English
 RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
 AN 2002:256544 CAPLUS
 DN 136:286888
 TI Vapor deposition of metal oxides, silicates and phosphates, and silicon
 dioxide
 IN Gordon, Roy G.; Becker, Jill; Hausmann, Dennis; Suh, Seigi
 PA President and Fellows of Harvard College, USA
 SO PCT Int. Appl., 51 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002027063	A2	20020404	WO 2001-US30507	20010928
	WO 2002027063	A3	20021010		
	W: JP, KR, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
EP	1327010	A2	20030716	EP 2001-975576	20010928
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
JP	2004527651	T	20040909	JP 2002-530823	20010928
EP	1772534	A2	20070411	EP 2006-26277	20010928
EP	1772534	A3	20070425		
	R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR				
KR	815009	B1	20080318	KR 2003-704494	20030328
US	20040043149	A1	20040304	US 2003-381628	20030902
US	6969539	B2	20051129		
US	20050277780	A1	20051215	US 2005-199032	20050808
KR	2007107813	A	20071107	KR 2007-724096	20071019
KR	814980	B1	20080318		

PRAI	US	2000-236283P	P	20000928
	US	2000-253917P	P	20001129
	EP	2001-975576	A3	20010928
	WO	2001-US30507	W	20010928
	KR	2003-704494	A3	20030328
	US	2003-381628	A1	20030902
OS	MARPAT	136:286888		